

Invention Title: Multi-Axes Tool Compensation – 3D and 5-axis real-time interactive tool compensation inside the CNC machine tool controller.

Inventor: Gary John Corey

Application No. 10/079,309

Inventor's Phone No.: (909) 674-8100

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CNC Machine Tool Parameters Ver.1.2

Tool Parameters

Size	Flute	Vant	Height	Wear	Custom1	Custom2
0.25	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0
0.0	0.0	0.0	0.0	0.0	0	0

Tool Definitions (Same Mode Only)

Corner Radius	Bottom Radius	Length	Type
0.0	0.0	0.0	3.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0

Machine Data

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Machine Settings

☐ 2 Spindle Feed Mode

☐ Backlash Compensation

☐ Backlash Grasp

TeachX Machine Center

☒ Absolute

☐ Incremental

☐ Plus/Minus

Tool Support

Spindle Speed: 0.0

End Speed: 1.0

F5-Tool Definitions F6-Tool Bits F7-Tool Photos F8-Tool Settings F9-Tool Setup

FIG 1.

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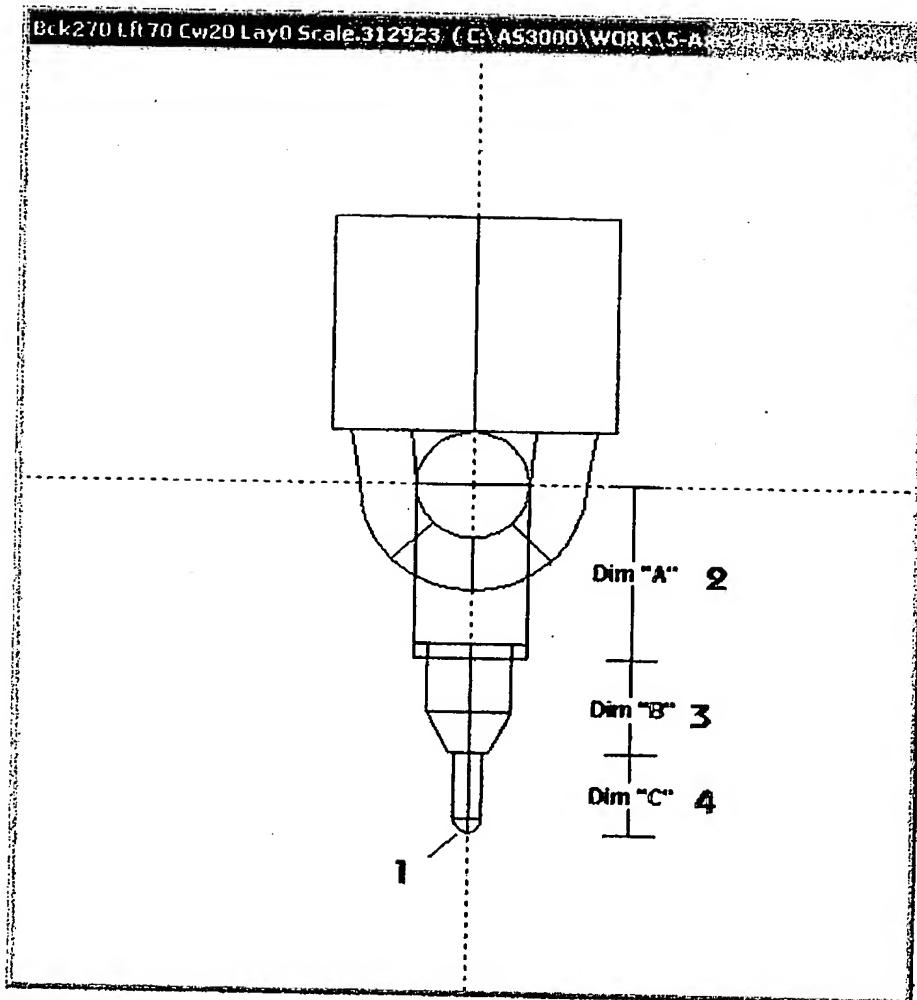


FIG 2.

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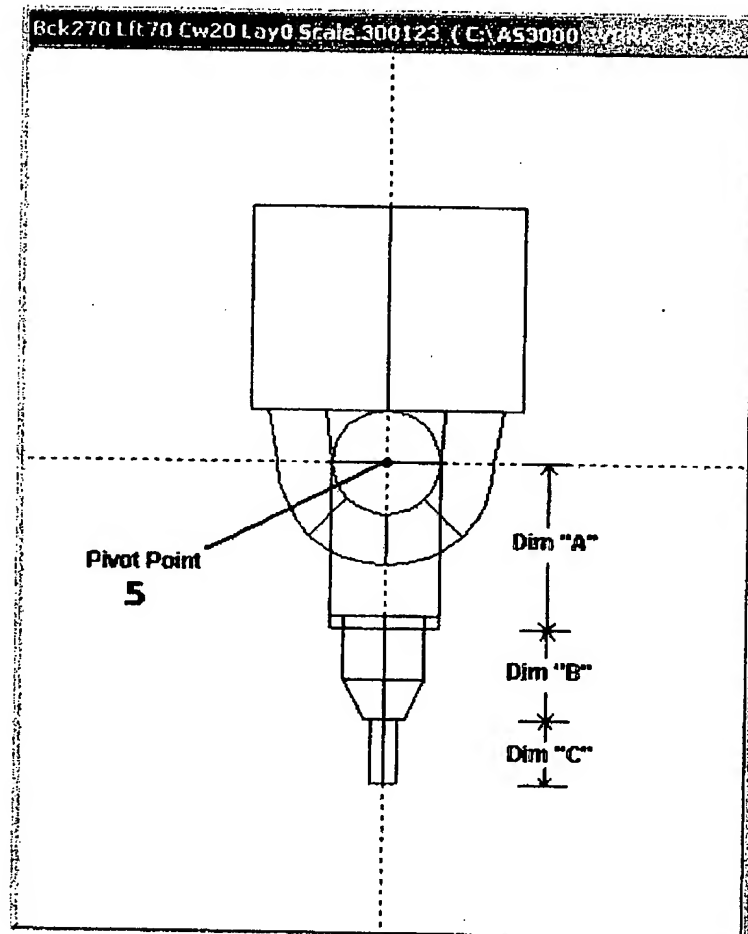


FIG 3.

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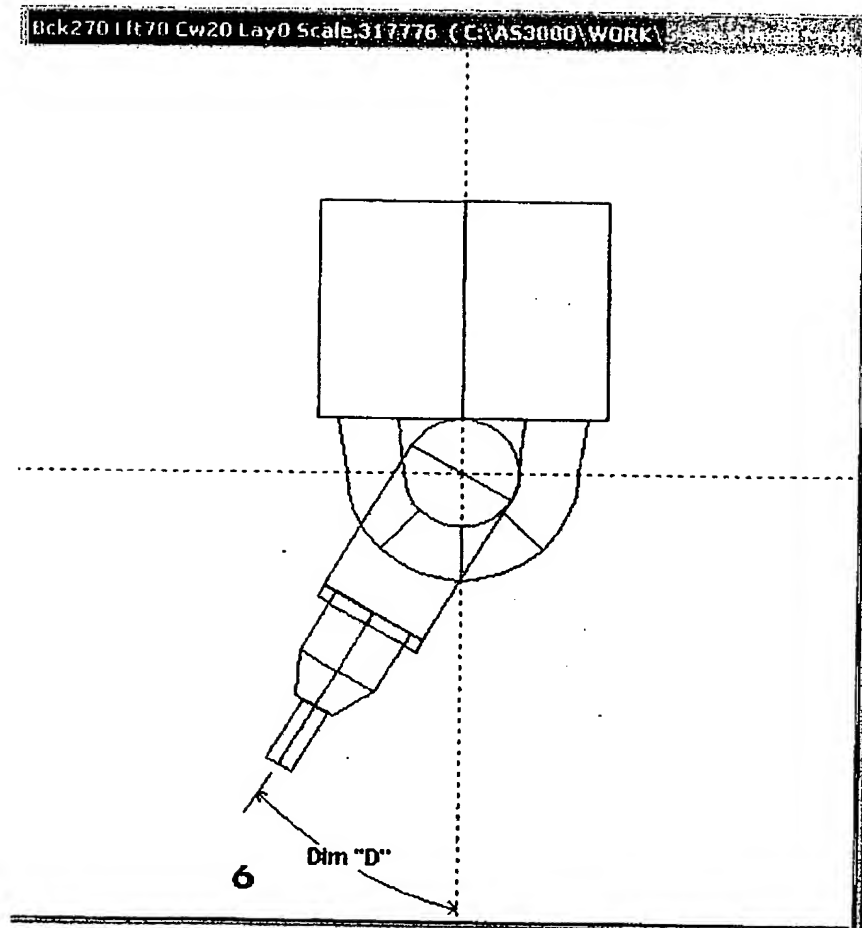


FIG 4.

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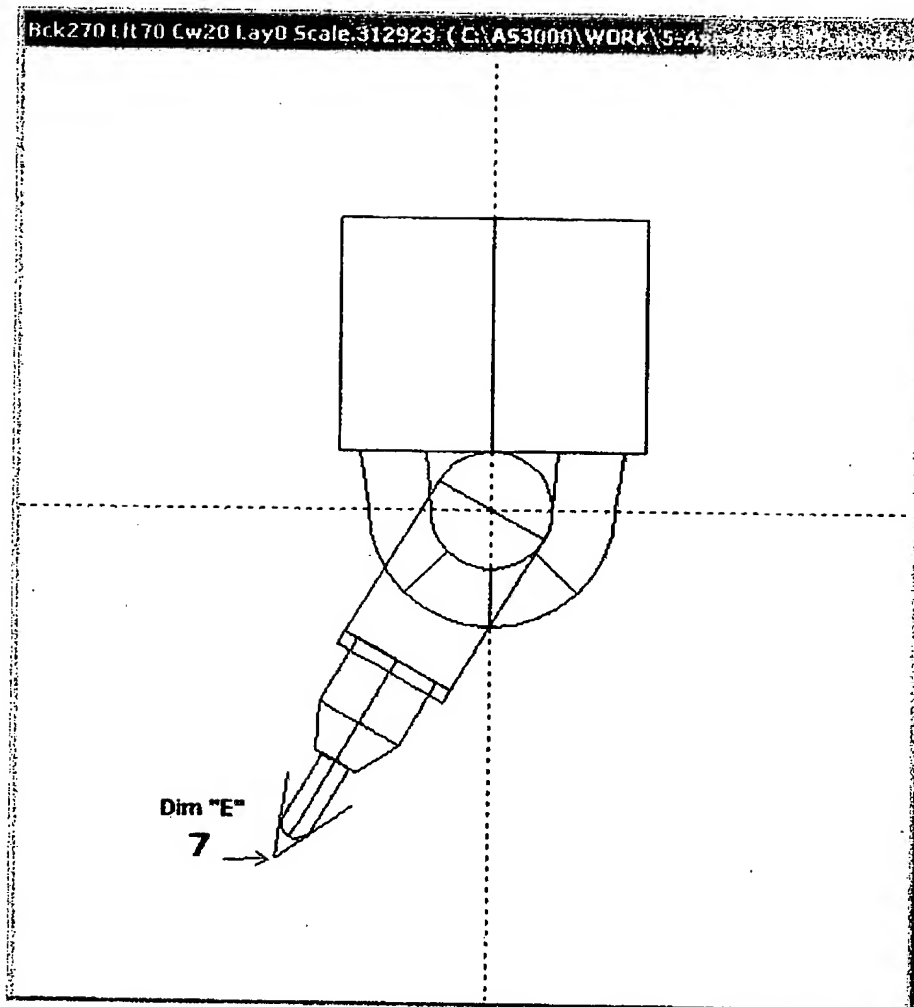


FIG 5.

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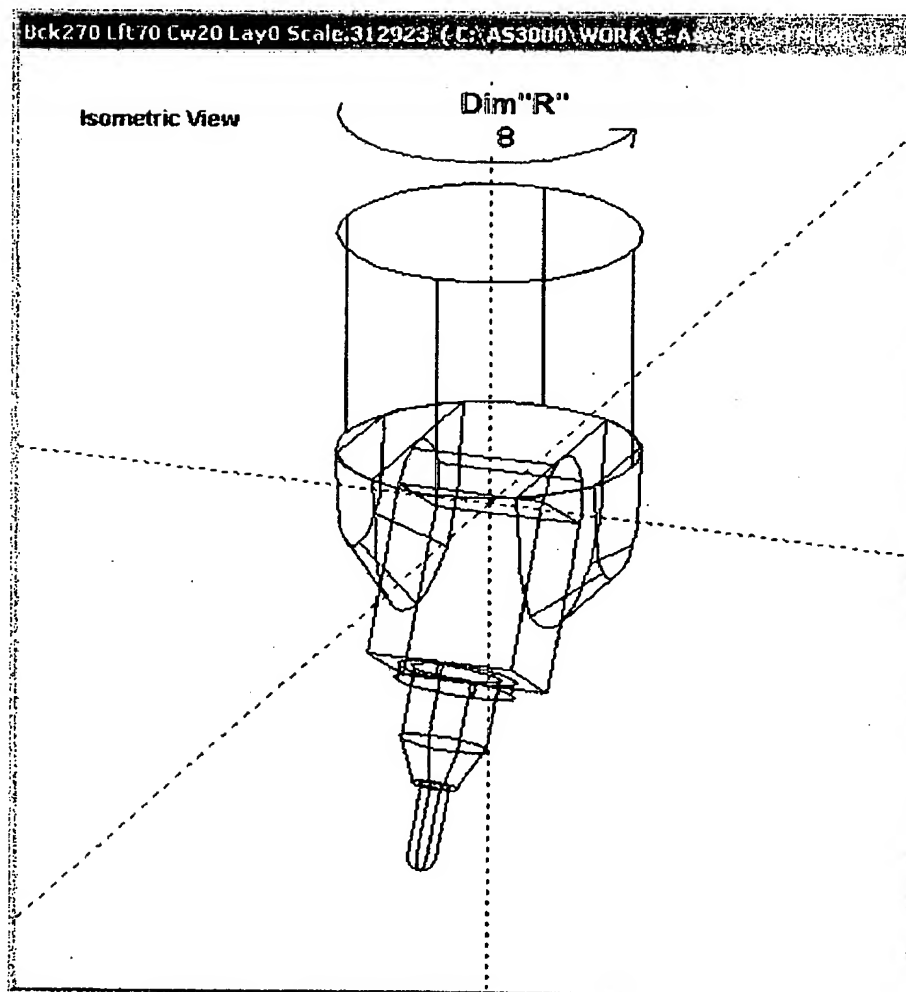


FIG 6.

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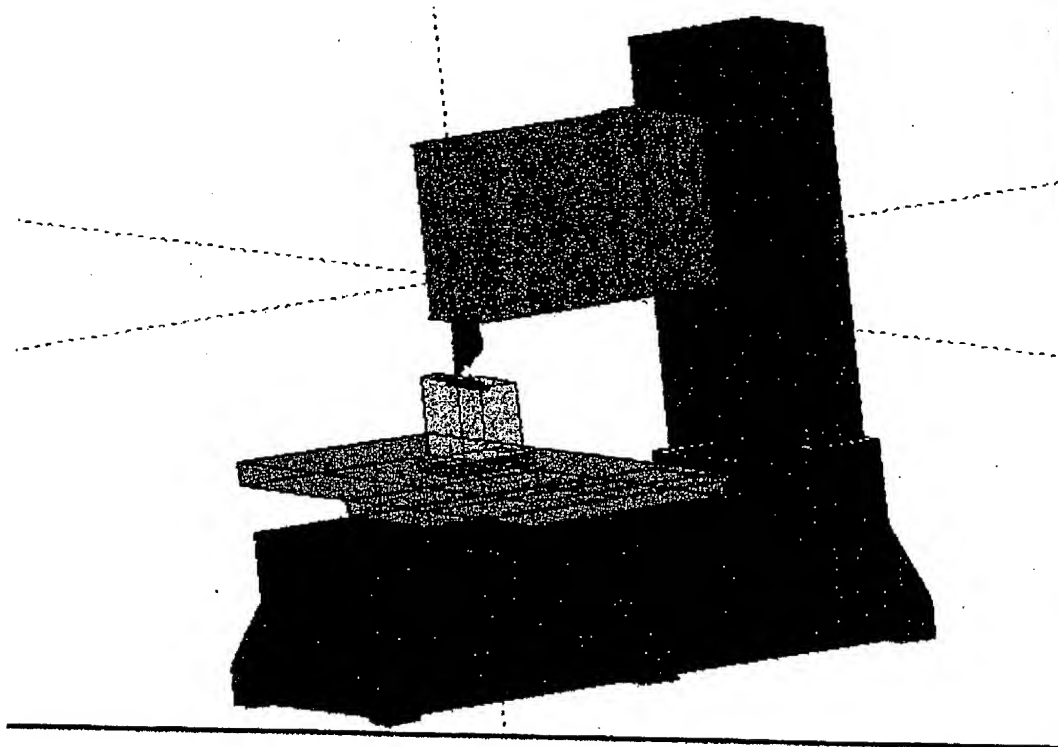


FIG 7.

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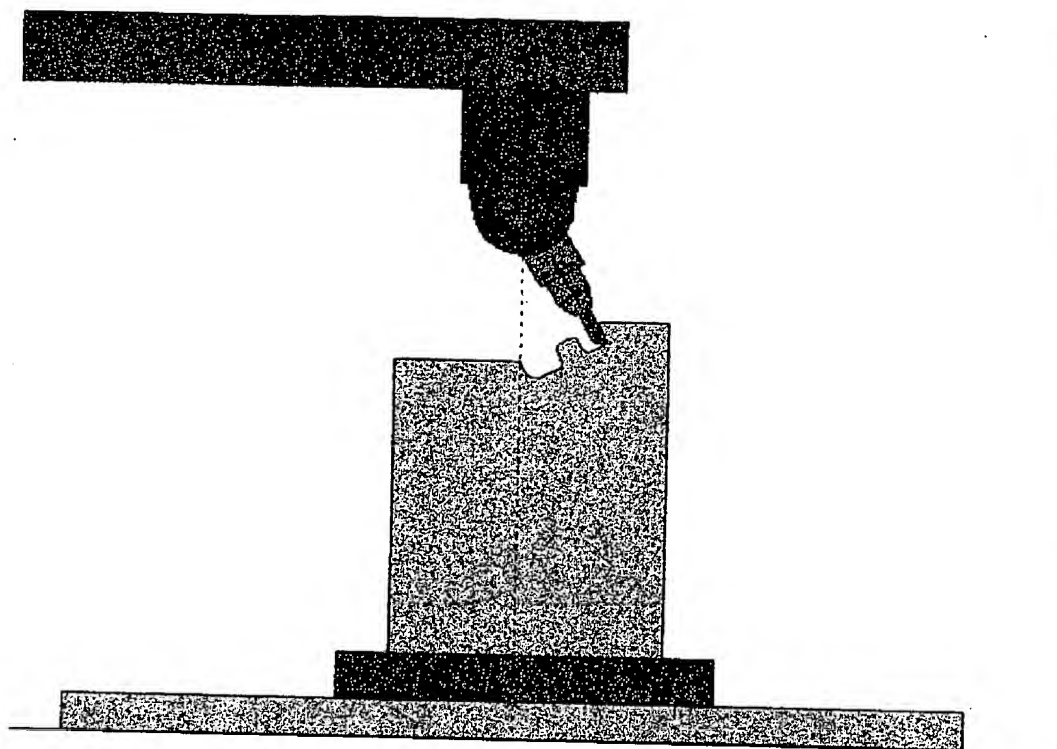


FIG 8.

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%
N10 T01 M6
N20 G90 S200 M3
N30 G0 A270. B0
N40 X0 Y-21. Z0 M8
N50 Z20.5
N60 G1 Y-10.933 Z17.9365 A270. B-30. F10.
N70 Y-3.2465 Z10.75 A270. B-60.
N80 Y0 Z.5 A270. B-90.
N90 Y-3.2465 Z10.75 A90. B-60.
N100 Y-10.933 Z17.9365 A90. B-30.
N110 Y-21. Z20.5 A90. B0
N120 G1 Z0
N130 G0 A0 B0
N140 X0 Y-21. Z0 S200 F10.
N150 G1 Z20.5
N160 G1 Y-10.9332 Z17.9367 A0 B-29.9993 F10.
N170 Y-3.2463 Z10.7498 A0 B-60.0007
N180 Y0 Z.5 A0 B-90.
N190 Y-3.2465 Z10.75 A180. B-60.
N200 Y-10.933 Z17.9365 A180. B-30.
N210 Y-21. Z20.5 A180. B0
N220 Z0
N230 G0 A0 B0
N240 M30
%

FIG 9.